Arcadia Biosciences Takes Next Step to Enable Farmers to Receive Carbon Credits for Reduced Nitrogen Fertilizer Use

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-- Company Submits Methodology Under United Nations Clean Development Mechanism As A Way To Encourage Reduced Carbon Emissions And Increase On-Farm Economics --

DAVIS, Calif. (April 2, 2012) -- Arcadia Biosciences, Inc., an agricultural technology company focused on developing technologies and products that benefit the environment and human health, today announced that the company has submitted a carbon credit methodology to the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change. The methodology would allow farmers to claim carbon credits from reduced fertilizer use in conjunction with Arcadia's Nitrogen Use Efficiency (NUE) technology. Arcadia's NUE technology enables crops to maintain high yields while requiring significantly reduced levels of nitrogen fertilizer.

Globally, agriculture is the second largest industrial source of greenhouse gas emissions (GHG), and the use of nitrogen fertilizer is a major component of those emissions. Despite its significance, most efforts to incentivize adoption of low carbon practices and technologies have bypassed agriculture. The United Nations CDM stimulates emissions reductions by allowing developing countries to earn carbon credits that can be traded and sold to industrialized countries.

To develop the methodology for calculating emissions reductions in agriculture, Arcadia Biosciences and the Ningxia (China) Academy of Agriculture and Forestry Science (NAAFS) have been measuring baseline greenhouse gas emissions from conventional rice production using varying levels of nitrogen fertilizer. Through field tests conducted since 2007, the organizations have quantified reductions in GHG emissions that result from decreasing nitrogen fertilizer application in conventional rice. They have also validated a model for predicting greenhouse gas emissions from rice. The study also found a measurable correlation between applied nitrogen and crop yield in the conventional varieties used.

While these field tests were done with conventional rice, the goal in the future is to combine the GHG methodology with Arcadia's NUE technology in rice and other crops in developing countries to achieve emissions reductions without compromising crop yields. This combination will reduce the GHG emissions per unit of food produced and reward farmers with additional value from carbon credits.

"Given the significant role that agriculture plays in global greenhouse gas emissions, the development of technologies and techniques that result in low carbon agriculture is a major objective," said Eric Rey, president and CEO of Arcadia Biosciences. "Our collaboration with NAAFS in China to establish baseline GHG emissions data from conventional rice production is a key piece of the puzzle. Approval of the draft methodology, along with future approval of NUE rice varieties, will mean that Chinese rice farmers can simultaneously reduce operating costs, increase profits, and improve our global environment."

About Arcadia Biosciences, Inc.
Based in Davis, Calif., with additional facilities in Seattle, Wash. and Phoenix, Ariz., Arcadia Biosciences is an agricultural technology company focused on the development of agricultural products that improve the environment and enhance human health. For more information visit www.arcadiabio.com.